[Intro]

The planned nature of the Netherlands — including polders, waterways, urban fabric, and infrastructure — allows for extensive oversight and developed land. Before habitation, the water has to be drained and diked to specifications. The definition of the exposed land is dependent upon the planning of the municipality in terms of design and function. The framework determined by these regions is site specific and land use efficient. “It is not certain whether these regions belong to the land or the sea” (Sijmons, 2002). However, certain issues rise when considering the diverse methods of development. Municipalities focus their internal efforts on an assortment of issues that inevitably determine the form, function, and perhaps market aspirations of that location. This report will assess a few examples of how the water affects planning and the unlimited design solutions that follow.

Consider water as the veins of the country, as a “gigantic water machine,” and its inexcusable existence both supporting and hindering the development of the land (Sijmons, 2002). Expansion is limited and forced to be considerably dense in terms of land use space. The limitation of land yields a greater amount of detailed planning. Thus, urban landscapes are unavoidable. The use of canals and larger bodies of water are celebrated within and around the urban settings. When traversing the diverse terrain a variety of experiences are exposed. The tightly packed physical components of downtown Utrecht refer to a human scale experience, while the expressively organized shoreline of Almere refers to a godly scale phenomenon. Each case entails an important distinction between the range of landscapes throughout the Netherlands and the undeniable beauty captured by the reaction to water.

In every case discussed, there is a practical and experiential value added to the atmosphere that is created by the carefully planned urban fabric. However, the practical may come before the experiential value and vice versa. Depending on the location and potential for each way of setting up the site, certain values are given to the water way system and physical attributes of the surrounding land — including building envelopes, building massing, and transportation ways.

The proceeding examples are not meant to quantify or define the specified location — Amsterdam, Utrecht, or Almere — but are meant to raise a set of various plans that are interrelated in terms of water, program, and the built environment. The Dutch’s inclination to plan allows this dynamic flexibility of experiences across the nation.
relative scale

Figure 1. Downtown Utrecht

Figure 2. City Centrum, Almere

Figure 3. IJburg, Amsterdam
Downtown Utrecht presents an atmosphere that is dense and personal. There are elements of unification that work together to create a mixed-use environment. As seen in figure 1 the relationship between the residence, sidewalk, street, and canals form to create a microcosm of life.

At the private level of the household (episode 1), the least amount of contact with the urban life is witnessed. When deep inside a residence away from the street activity, there is a greater disconnection and resulting change of environment. Moving towards the center of the microcosm where activity is abundant, the next episode (2) resides at the façade of the building. This is the physical transition between indoor and outdoor life. Instantly, the atmosphere changes; the ground is hand-paved with single bricks, natural foliage comes to life, and the dense activity of passersby catches you off guard. In some form or another there is a method to all of the madness experienced. The cooperation of the pedestrians, bicycles, and automobiles is universally organized and understood so that flow is effortless.

Episode 3 uncovers the pedestrian walk and bike lanes. These are collectively used by the public and managed very well by each pedestrian. Episode 4 of the figure shows the general relationship of the automobile realm to the canal and massing of the buildings. When lightly populated with traffic, this vicinity is usually used both as a pedestrian and vehicle passage.

Finally at the heart of the figure resides the flowing canal water (episode 5) that constantly reminds the community why and how they remain above water. It offers an alternative relation to the city if you were to take a paddle boat or canoe along the dikes of the city. The use of dikes and canals are all part of their water management system that assists an urge to subsist below sea level. This idea of subsistence is a matter of development and planning that works with the hydrology of the surrounding seas and land masses of the Netherlands. (Komossa, Meyer, Risselada, Thomaes, & Jutten, 2005)

City Centrum, Almere

figure 2

Created by OMA and Rem Koolhaas Almere’s City Centrum is a new type of development project in itself. It has been created on a level that is unique for such a city. In order to prepare for the rising future population, a mixed-use function of retail, housing, and restaurant capacities has been integrated. The ground level of the foundation is underground parking, while above is the habitable, mixed-use vicinity. Amenities include commercial restaurants, commercial retail, apartment housing, and condo housing. These type of dwellings exist both on the upper levels of the centrum and near the water as building complexes.

The development is unusual because of raising the centrum stage as if it were on a platform; thus forming a hill – a rare sight in the eyes of a Dutch native because of the flat elevation throughout the country. While the feeling of a raised elevation provides an experiential value to the site, it also provides a practical function of space for underground parking.
The experience atop the highest point of OMA’s centrum is as artificial as it is modern. The elevation of the 1st level may appear to raise the human higher above the perceived normal vertical “sea level barrier,” but the large scale of the buildings dwarfs your sense of height. The feeling of scaling the artificial hill is relevant and experienced but perhaps on a relative, local scale. Since natural hills do not exist in the Netherlands, this ‘local scale’ might be explained by the man-made development of raising the ‘platform’ on which the centrum exists. Sight lines restrict a distanced view of the peripheral city outside of the connected sheets or open spaces connecting the centrum height.

Level 2 gets closer to the waterfront and begins to present its existence. Still, the surrounding structures – even closer to the water – tend to dwarf the human scale. The 3rd level allows greater expansion of sight lines to the water and green-filled distance beyond the water. Ships and water activity come alive. I would argue this section as a transition from the retail area to the waterfront. If walking towards the water the massive structures are in majority left behind; commercial types anyway.

The 4th mixes a stubborn use of “complex housing” and an attempt to flatten out the waterfront surface for a union area. I view it as a stubborn transition from the large scale building complexes to the body of water because it lacks a uniform personal connection; almost as if the site is in competition with the dike. The huge scale of the plaza and the sand or pebble-like ground material is also bizarre. It seems out of place and almost uninhabitable due to the messy, grimy residue left behind on any clothing or shoe that traverses it. The space also lacks any sort of picnic table or seating other than the terraced steps down to the water.

While walking the centrum, I felt little urge to confront the water (until I got closer) because of a disconnection when “inside” the centrum arena. Perhaps it was due to a weakened experience of the housing complexes that created barriers adjacent to the water; which was realized after visiting the union area. The housing may have an unspoken, private connection with the water that could overthrow a public connection to it. However, fairly frequent scheduled events on the terrace reinforce the communal interactions within it.

[ijburg, Amsterdam]

figure 3

Beginning at episode 1, the experience beckons either a commercial/retail space or a housing space. In each case, public and private spaces result from the building type. In terms of public space, episode 2 is immediately connected to the typical 3-story building height, while the private housing remains disconnected from public interaction in most cases. In the case that windows face the street/sidewalk, the owner has the option to cover up the transparent glass with whatever material or to reveal the inner, private space; perhaps in an attempt to showcase their pride and joy. (Krier, 2006)

Episodes 2 and 3 naturally provide a separation between 4 and 1 due to the traffic – foot, bike, and auto – that passes through the space. As seen in the diagram, the spaces are shown at relative scale. The mere human scale of the sidewalk is depicted by the width and elevated stance from the automobile lane. Unlike the other examples, a bike coexists within the width of the auto lane. This is probably due to
less traffic through the area. Given the typical low traffic volume, ease of access and flow circulation of the street plan is consistent.

Moving on to episode 4 and 5 a new dynamic is created by the adjacent housing projects that literally hug the water with a brick wall. In this case, the water way is uniquely connected to the private housing space; and consequently only a visual attraction by the passerby is attained. While the public may have access to the water, it would cause more hassle than pleasure to haul a boat to the destination if house was not owned in the designated development. Even then, cost-efficient boat docking is hard to come by. A fellow architect of a similar project – housing kissing the water – explained the difficulty of getting logical boat docking for residents legitimized in the plan (Haan, 2008).

[Final breath]

The Netherlands is a country that effectively ties land, water, and man together in a beautiful, functional, and expressive manner. Essentially, the country works with the hydrology instead of against; despite the power of the natural substance that occasionally leaves the land in turmoil. The Dutch are a strong-willed people who are economically strong that refuse to let the power of water force them off of their native land. Their way with the water is apparent in the planning and development of polders and dikes across the nation.

The American way of development in relation to water is extremely dynamic across the nation but for arguments sake let us consider the economic benefits of development. Assuming that we are not below sea level and spending less time and money manipulating waterways is preferred, we can begin to compare and contrast two significantly diverse nations.

To contrast the relationship of water, land, and development between two nations there needs to be a few common variables. For instance, sea level and land availability are two issues that I see fit for such a comparison. They each provide a basis and sufficient points for argument on either side.

The Netherlands is inherently under sea level which makes development of habitable land difficult. The water must be manipulated into canals and around dikes in order to accommodate the polder model. In many cases, the water is celebrated; as previously mentioned. In some cases it is the center of attention – as with the downtown Utrecht model – and in other cases the water is used as a supplemental nuance to the development – as seen with the Almere and Amsterdam models.

The Netherlands' economy is strong enough that they are able to provide the capital necessary for extreme engineering feats. The ability to plan on such a small and yet large scale cooperatively enables the country to strive ahead and create beautiful environments with their given land and hydrologic situation. The amount of land that the nation works with is limited so the response to such planning is imperative. This is seen throughout each model mentioned across the country.

On the other hand, the American standard of development does not need to bear such mind to the sea level since the country is above it. With that, the resulting land development is not a response to the imminent danger of water, but instead the guidelines to stay within a certain economic framework – less
time equals less money. All too often do developers implement cookie-cutter plans in order to save money. Since the site specific characteristics of a given location are not considered, the water is typically built around instead of within. Perhaps the increased cooperation and consideration with hydrology will increase beauty, demand, and economic success of such relevant developments.

It is these issues — land use, hydrology, beauty, cooperation, and collaboration — that must always be deemed as definitive variables in any development in the United States, which certainly does not define the way we develop today. Perhaps a greater regard for the environment may yield a greater all around success for the developments of architecture, landscaping, and planning in America.

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**Works Cited**


